

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P295827

Luminaire Tested: **24RLN-LD5-42-UNV-L83050-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P295827  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-085-1)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24RLN-LD5-42-UNV-L83050-W2A1-U-5000K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER WITH STANDARD LENS  
Light Source: (504) 80 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4467.0 lumens  
Efficiency: N/A  
Efficacy: 146.4 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.19 / 1.29  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

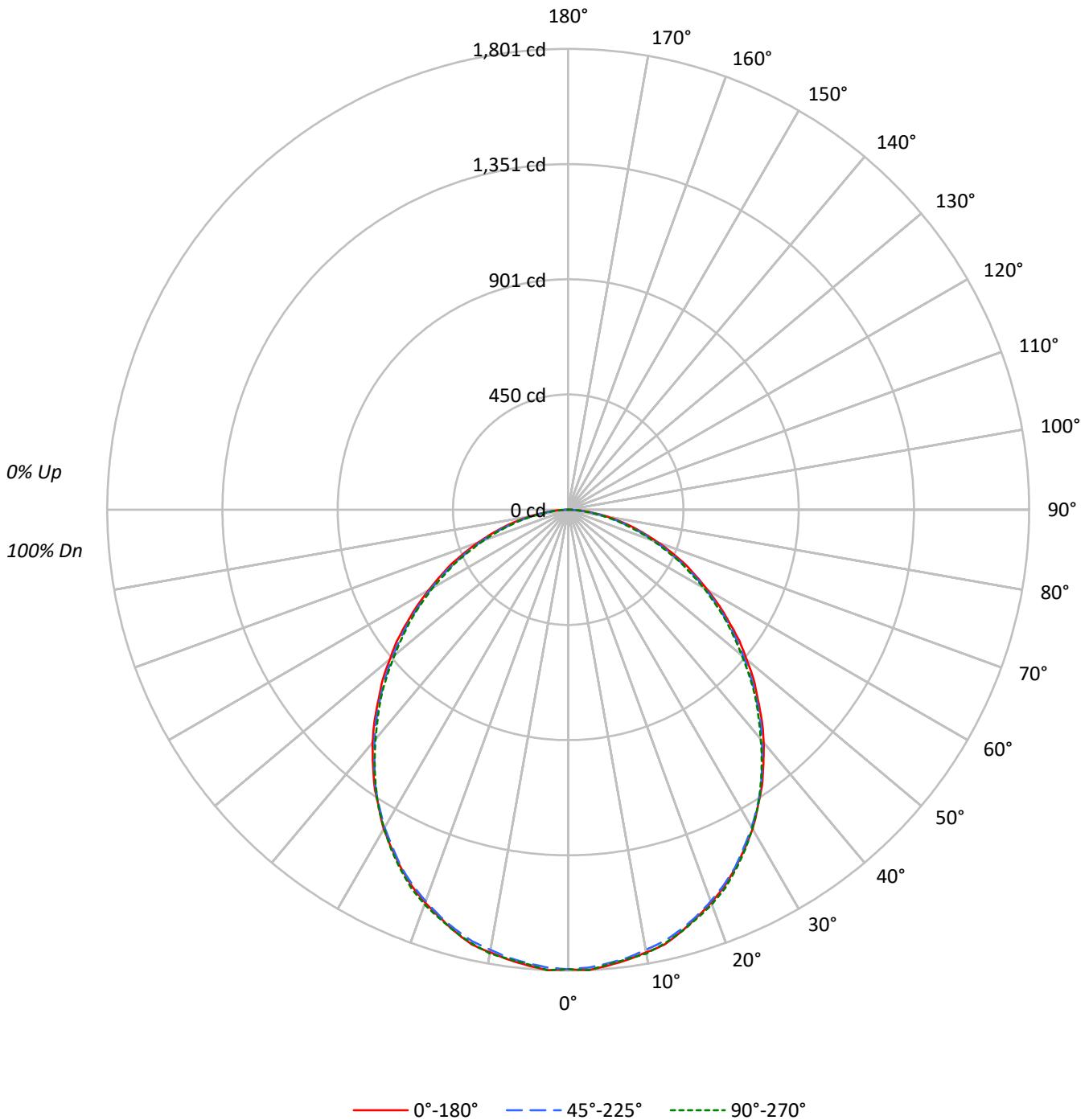
Input Watts (W): 30.504  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	105	101	97	107	102	99	95	98	95	92	94	92	90	91	89	87	85
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	77	74	72
3	91	81	73	67	89	80	72	66	77	70	65	74	69	64	71	67	63	61
4	84	72	64	57	82	71	63	57	68	62	56	66	60	55	64	59	55	52
5	77	65	56	50	75	64	55	49	62	54	49	60	53	48	58	52	48	46
6	72	59	50	44	70	58	49	43	56	48	43	54	48	43	53	47	42	40
7	66	53	45	39	65	52	44	39	51	44	38	49	43	38	48	42	38	36
8	62	49	40	35	60	48	40	35	47	39	34	45	39	34	44	38	34	32
9	58	45	37	31	57	44	36	31	43	36	31	42	36	31	41	35	31	29
10	54	41	34	28	53	41	33	28	40	33	28	39	33	28	38	32	28	26

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2416	2416	2416
5°	2415	2404	2410
10°	2400	2386	2406
15°	2379	2367	2379
20°	2340	2332	2350
25°	2294	2289	2302
30°	2239	2228	2234
35°	2168	2159	2154
40°	2088	2068	2055
45°	1994	1974	1966
50°	1903	1873	1852
55°	1802	1775	1758
60°	1695	1664	1644
65°	1601	1542	1528
70°	1468	1412	1383
75°	1349	1266	1214
80°	1184	1106	1038
85°	957	889	756



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	169.4	3.8
10°-20°	480.3	10.8
20°-30°	710.5	15.9
30°-40°	819.9	18.4
40°-50°	800.8	17.9
50°-60°	676.3	15.1
60°-70°	481.7	10.8
70°-80°	260.8	5.8
80°-90°	67.3	1.5
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1360.2	30.4
0°-40°	2180.1	48.8
0°-60°	3657.2	81.9
0°-90°	4467.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4467.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1796	1796	1796	1796	1796	
5°	1788	1788	1780	1784	1784	170
15°	1708	1700	1699	1706	1708	481
25°	1545	1536	1542	1548	1551	711
35°	1320	1310	1314	1310	1311	824
45°	1048	1039	1038	1033	1033	810
55°	768	758	757	749	749	689
65°	503	493	484	478	480	496
75°	259	251	244	238	234	275
85°	62	60	58	50	49	73
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1795.6	1795.6	1795.6	1795.6	1795.6
2.5°	1801.4	1794.2	1791.3	1792.7	1801.4
5°	1788.4	1788.4	1779.8	1784.1	1784.1
7.5°	1774.0	1775.4	1766.8	1774.0	1771.1
10°	1756.7	1752.4	1746.6	1758.1	1761.0
12.5°	1740.8	1730.8	1727.9	1735.1	1736.5
15°	1707.7	1700.5	1699.1	1706.3	1707.7
17.5°	1670.2	1671.7	1665.9	1676.0	1674.6
20°	1634.2	1631.3	1628.4	1640.0	1641.4
22.5°	1593.9	1585.2	1588.1	1598.2	1601.1
25°	1544.9	1536.2	1542.0	1547.7	1550.6
27.5°	1493.0	1488.7	1487.2	1494.4	1497.3
30°	1441.1	1433.9	1433.9	1442.5	1438.2
32.5°	1377.7	1371.9	1374.8	1377.7	1379.1
35°	1320.0	1310.0	1314.3	1310.0	1311.4
37.5°	1252.3	1245.1	1243.7	1242.2	1242.2
40°	1188.9	1183.1	1177.4	1177.4	1170.2
42.5°	1119.7	1112.5	1109.6	1105.3	1101.0
45°	1047.7	1039.0	1037.6	1033.3	1033.3
47.5°	982.8	969.9	968.4	959.8	959.8
50°	909.3	900.7	894.9	889.2	884.8
52.5°	843.0	834.4	825.7	820.0	815.7
55°	768.1	758.0	756.6	749.4	749.4
57.5°	700.4	691.7	686.0	677.3	678.8
60°	629.8	621.1	618.2	611.0	611.0
62.5°	563.5	556.3	551.9	544.7	539.0
65°	502.9	492.9	484.2	478.4	479.9
67.5°	436.7	425.1	420.8	415.0	410.7
70°	373.2	366.0	358.8	351.6	351.6
72.5°	314.2	307.0	302.6	294.0	291.1
75°	259.4	250.8	243.5	237.8	233.5
77.5°	204.6	196.0	191.7	184.5	184.5
80°	152.8	147.0	142.7	139.8	134.0
82.5°	105.2	102.3	98.0	93.7	89.3
85°	62.0	60.5	57.6	50.4	49.0
87.5°	24.5	24.5	21.6	20.2	18.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)